Claims:

1. A material for the diagnosis of tumors, containing a substance, with which

- conductine, its mutants and variations or parts thereof or
- genes, which code for conductine, its mutants and variations or parts thereof, or
- m-RNA sequences, which are read by these genes,

are detected.

2. The material for the diagnosis of tumors of claim 1, containing specific antibodies to conductine, its variations or mutants or parts thereof.

3. The material for the diagnosis of tumors of claims 1 and 2, wherein the specific antibodies are monoclonal antibodies.

4. The material for the diagnosis of tumors of claim 1, containing corresponding oligonucleotide primers and/or DNA probes for the detection of the genes and their mutations.

5. The material for the diagnosis of tumors of claim 1, containing corresponding oligonucleotide primers and/or DNA probes for the detection of RNA sequences.

6. A material for the treatment of tumors containing a substance, which activates/reactivates the action of conductine in the body.

7. The material of claim 6, containing a substance, which activates the gene promoter of conductine.

8. The material of claim 6, containing a substance, which increases the stability of mRNA sequences.

9. The material of claim 6, containing a substance, which increases the activity of conductine.

10. Conductine, its variations, its mutants as well as parts thereof.

11. The conductine of claim 10, characterized by the amino acid sequence 1 to 840 of Figure 1 (SEQ ID No. 1), Figure 1 being part of this claim.

12. The partial sequence of conductine of claim 10, characterized by the amino acid sequence 78 to 200 (RGS domains) of Figure 1 (SEQ ID No. 2).

13. The partial sequence of conductine of claim 10, characterized by the amino acid sequence 343 to 396 (GSK 3b) of Figure 1 (SEQ ID No. 3).

14. The partial sequence of conductine of claim 10, characterized by the amino acid sequence 397 to 465 (b-catenine binding domains) of Figure 1 (SEQ ID No. 4).

15. The partial sequence of conductine of claim 10, characterized by the amino acid sequence 783 to 833 (disheveled homology region) of Figure 1 (SEQ ID No. 5).

16. The partial sequence of Adenomatosis Poliposis Coli (APC), characterized by the amino acid sequences 1464 to 1604, 1516 to 1595, 1690 to 1778 and 1995 to 2083 as the interaction sites of RGS domains.

17. A cDNA sequence of conductine, its variations or mutants or parts thereof.

18. The cDNA sequence of the conductine of the nucleotide sequence 1 to 2825 of Figure 2 (SEQ ID No. 6), Figure 2 being a component of this claim.

19. The cDNA partial sequence of the conductine of the nucleotide sequence 446 to 814 (RGS gene section) of Figure 2 (SEQ ID No. 7).

20. The cDNA partial sequence of the conductine of the nucleotide sequence 1241 to 1402 (gene section of the GSK 3b-binding domains) of Figure 2 (SEQ No. 8).

21. The cDNA partial sequence of the conductine of the nucleotide sequence 1403 to 1609 (gene section of the b-catenine binding domains) of Figure 2 (SEQ ID No. 9).

22. The cDNA partial sequence of the conductine of the nucleotide sequence 2561 to 2713 (gene section of the disheveled homology region) of Figure 2 (SEQ ID No. 10).

23. Use of the conductine gene for the gene therapy of tumor diseases, wherein a vector is constructed with the conductine gene, a gene transfer

subsequently takes place in the human body and, with that, the activity of the conductine in the cells of the body is restored.